

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1-19. (Canceled)

20. (Currently Amended) An apparatus for coating the outer peripheral surface of a pillar structure comprising:

_____ ~~which is provided with a holding means~~ holder which holds the pillar structure in ~~nearly~~ substantially vertical direction and rotates together with the held pillar structure on an axis of ~~nearly~~ substantially vertical direction as a common rotating axis,

_____ a supplying and coating ~~means~~ mechanism which supplies a coating material to the outer peripheral surface of the rotating pillar structure and coats the coating material on the outer peripheral ~~surface and~~ surface, and

_____ a plate-like ~~smoothing means~~ smoother the one longer side end portion of which is disposed at a given position with respect to the outer peripheral surface and which smoothes the coating surface of the coating material supplied to and coated on the outer peripheral surface,

_____ wherein the ~~smoothing means~~ smoother has a smoothing plate and a sheet-like elastic body provided at the longer side end portion of the smoothing plate on the side of the pillar structure, the elastic body is disposed so that it contacts with the outer peripheral surface of the pillar structure, the coating material is supplied to and coated on the outer peripheral surface through the elastic body, the coating material is delivered by the elastic body from the supplying and coating mechanism to the outer peripheral surface of the pillar structure, and the coating surface is smoothed between the outer peripheral surface and the elastic body.

21. (Currently Amended) An apparatus for coating the outer peripheral surface of a pillar structure according to claim 20, wherein the ~~smoothing means~~smoother is disposed so that its longer direction ~~nearly~~substantially coincides with the central axis direction of the pillar structure and the elastic body constituting the ~~smoothing means~~smoother is disposed so that it contacts with the outer peripheral surface of the pillar structure between both end faces of the pillar structure.

22. (Currently Amended) An apparatus for coating the outer peripheral surface of a pillar structure according to claim 20, wherein the ~~holding means~~holder holds the pillar structure placed thereon with one end thereof facing downward and has a pedestal rotating together with the held pillar structure on the axis of the ~~nearly~~substantially vertical direction as the common rotating axis.

23. (Currently Amended) An apparatus for coating the outer peripheral surface of a pillar structure according to claim 22, wherein the ~~holding means~~holder has a cam which is disposed on the side of another end of the pillar structure placed and held on the pedestal and rotates on the axis of the ~~nearly~~substantially vertical direction as the common rotating axis.

24. (Currently Amended) An apparatus for coating the outer peripheral surface of a pillar structure according to claim 23, wherein the outer peripheral shape of the pedestal and that of the cam are ~~nearly~~substantially the same.

25. (Currently Amended) An apparatus for coating the outer peripheral surface of a pillar structure according to claim 22 which is further provided with a centering ~~means~~mechanism which holds the pillar structure and the pedestal and/or the cam in a given positional relation.

26. (Currently Amended) An apparatus for coating the outer peripheral surface of a pillar structure according to claim 22 which is further provided with a following ~~means~~mechanism which drives the ~~smoothing means~~smoother following the outer periphery of the

pedestal and/or the cam so that the ~~smoothing means~~smoother is disposed at a given position with respect to the outer peripheral surface of the pillar structure.

27. (Currently Amended) An apparatus for coating the outer peripheral surface of a pillar structure according to claim 23, wherein the following ~~means~~mechanism has first and second following rollers which are disposed at a given distance from each other and move backward and forward following the outer periphery of the cam while contacting with the outer periphery of the cam together with the supplying and coating ~~means~~mechanism and the ~~smoothing means~~smoother, and the first and second following rollers are disposed so that the angle formed by a straight line passing through the centers of the respective rollers and a tip portion of the ~~smoothing means~~smoother is a given angle.

28. (Currently Amended) An apparatus for coating the outer peripheral surface of a pillar structure according to claim 27, wherein the following ~~means~~mechanism further has third and fourth following rollers which move backward and forward following the outer periphery of the pedestal while contacting with the outer periphery of the pedestal together with the supplying and coating ~~means~~smoother and the ~~smoothing means~~smoother and the rotating axis of the third following roller and that of the first following roller are common and the rotating axis of the fourth following roller and that of the second following roller are common.

29. (Previously Presented) An apparatus for coating the outer peripheral surface of a pillar structure according to claim 20, wherein the sheet-like elastic body has a width of 1-10 mm.

30. (Previously Presented) An apparatus for coating the outer peripheral surface of a pillar structure according to claim 20, wherein the sheet-like elastic body has a thickness of 1-5 mm.

31. (Previously Presented) An apparatus for coating the outer peripheral surface of a pillar structure according to claim 29, wherein the sheet-like elastic body has a thickness of 1-5 mm.

32. (Previously Presented) An apparatus for coating the outer peripheral surface of a pillar structure according to claim 20, wherein the sheet-like elastic body has a hardness of 30-80.

33. (Previously Presented) An apparatus for coating the outer peripheral surface of a pillar structure according to claim 20, wherein the elastic body comprises rubber or sponge.

34. (Previously Presented) An apparatus for coating the outer peripheral surface of a pillar structure according to claim 22, wherein the outer periphery of the pedestal and/or the cam comprise stainless steel or ceramics.

35. (Previously Presented) An apparatus for coating the outer peripheral surface of a pillar structure according to claim 20, wherein the smoothing plate comprises stainless steel or ceramics.

36. (Previously Presented) An apparatus for coating the outer peripheral surface of a pillar structure according to claim 20, wherein the shape of a section of the pillar structure cut along a plane perpendicular to the central axis of the pillar structure is circular or elliptical.

37. (Previously Presented) An apparatus for coating the outer peripheral surface of a pillar structure according to claim 20, wherein the pillar structure is a honeycomb structure comprising a plurality of cells which are flow paths for fluid.

38. (Currently Amended) An apparatus for coating the outer peripheral surface of a pillar structure according to claim 20, wherein the supplying and coating ~~means~~ mechanism

and the ~~smoothing means~~smoother can rotate together along the outer periphery of the pillar structure.

39. (Currently Amended) A method for coating the outer peripheral surface of a pillar structure using an apparatus for coating the outer peripheral surface of a pillar structure as recited in claim 20, wherein the method comprises the steps of

holding the pillar structure by the ~~holding means~~, holder,

supplying the coating material from the supplying and coating ~~means~~ mechanism on the outer peripheral surface of the pillar structure and coating the coating material thereon while rotating the pillar structure and the ~~holding means~~holder on the axis of nearly vertical direction as a common rotating axis, and

smoothing the coating surface of the supplied and coated coating material between the outer peripheral surface and the sheet-like elastic body.